What is claimed is:

10

15

20

25

30

1. A method of manufacturing a radial tire for a construction vehicle having a band making step of making one layer of a carcass layer that arranges numerous steel cords in parallel into a cylindrical band,

wherein at least one layer of a shape retaining layer arranging numerous organic fiber cords in parallel is wrapped on an outer peripheral side of the carcass layer constituting the cylindrical band such that the organic fiber cords cross the steel cords of the carcass layer when making the cylindrical band.

 The method of manufacturing a radial tire for a construction vehicle according to claim 1,

wherein a code angle of the steel cords of the carcass layer to the circumferential direction of the tire is set in a range from 85° to 90°, and

a width in the axial direction of the tire of at least one layer of the shape retaining layers is set in a range from 60% to 100% of a space between bead cores disposed on both end portions of the cylindrical band.

3. The method of manufacturing a radial tire for a construction vehicle according to claim 2,

wherein the code angle of the steel cords of the carcass layer to the circumferential direction of the tire is set substantially equal to 90° , and

at least two layers of shape retaining layers in which the organic fibers thereof to cross each other between the two layers are provided.

4. The method of manufacturing a radial tire for a construction vehicle according to any one of claims 1 to 3,

wherein a crossing angle of the organic fiber cords relative to the steel cords is set in a range from 1° to 12°.

5. The method of manufacturing a radial tire for a construction vehicle according to claim 2,

5

10

15

20

25

30

wherein the shape retaining layers include a first shape retaining layer set to a width in the axial direction of the tire in a range from 60% to 100% of the space between the bead cores disposed on the both end portions of the cylindrical band, and a second shape retaining layer laminated on an outer peripheral side in a central region of the first shape retaining layer and set to a smaller width than that of the first shape retaining layer, and

a crossing angle defined between the organic fiber cords of the second shape retaining layer and the steel cords of the carcass layer is set greater than a crossing angle defined between the organic fiber cords of the first shape retaining layer and the steel cords of the carcass layer.

6. The method of manufacturing a radial tire for a construction vehicle according to claim 5,

wherein the width in the axial direction of the tire of the second shape retaining layer is set in a range from 15% to 45% of the space between the bead cores.

7. The method of manufacturing a radial tire for a construction vehicle according to any one of claims 5 and 6,

wherein a crossing angle of the organic fiber cords of the first shape retaining layer relative to the steel cords of the carcass layer is set in a range from 1° to 12°, and

a crossing angle of the organic fiber cords of the second shape retaining layer relative to the steel cords of the carcass layer is set in a range from 30° to 70°.

8. A radial tire for a construction vehicle manufactured by the manufacturing method according to any one of claims 1 to 7.